Applicant: Yaakov Naparstek et al.

Serial No.: 09/847,637

: May 2, 2001 2 of 10



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## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of Claims:

- 1. (Currently amended) A peptide, the sequence of which consists of part or all of SEO ID NO:1, wherein the sequence comprises SEQ ID NO:2, or SEQ ID NO:3.
- 2. (Previously presented) The peptide of claim 1, the sequence of which consists of SEO ID NO:2.
- 3. (Previously presented) The peptide of claim 1, the sequence of which consists of SEO ID NO:3.
- 4. (Withdrawn) A B cell epitope peptide comprising the amino acid sequence as denoted by SEQ ID NO:4.
  - 5. (Previously presented) A peptide as claimed in claim 1, being a synthetic peptide.
  - 6. (Original) A chemically modified peptide according to claim 5.
- 7. (Previously presented) A peptide as claimed in claim 1, capable of conferring immunity against autoimmune and/or inflammatory disorders.
- 8. (Withdrawn) A nucleic acid sequence encoding a B cell epitope peptide as claimed in claim 1.

Serial No.: 09/847,637 Filed: May 2, 2001

Page : 3 of 10

9. (Withdrawn) A DNA sequence as claimed in to claim 8.

- 10. (Withdrawn) A DNA sequence as claimed in claim 9 comprising the nucleic acid sequence as denoted by SEQ ID NO:5.
- 11. (Withdrawn) A DNA construct comprising a nucleic acid sequence as claimed in claim 8.
  - 12. (Withdrawn) A DNA construct comprising the DNA sequence as claimed in claim 9.
- 13. (Previously presented) A vaccine comprising as an active ingredient an effective vaccinating amount of at least one peptide as claimed in claim 1, optionally further comprising a pharmaceutically acceptable carrier, diluent, additive or adjuvant.
- 14. (Withdrawn) A vaccine comprising as active ingredient a DNA sequence as claimed in claim 1, optionally further comprising a pharmaceutically acceptable carrier, diluent, additive or adjuvant.
- 15. (Original) A vaccine as claimed in claim 13, for conferring immunity against autoimmune or inflammatory disorders.
- 16. (Previously presented) The vaccine as claimed in claim 15, for conferring immunity against arthritis.
- 17. (Withdrawn) An antibody directed against a B cell epitope peptide comprising the amino acid sequence as denoted by SEQ ID NO:1.

Serial No. : 09/847,637 Filed : May 2, 2001 Page : 4 of 10

18. (Withdrawn) An antibody directed against a B cell epitope peptide having the amino acid sequence as denoted by SEQ ID NO:2.

- 19. (Withdrawn) An antibody directed against a B cell epitope peptide having the amino acid sequence as denoted by SEQ ID NO:3.
- 20. (Withdrawn) An antibody directed against a B cell epitope peptide comprising the amino acid sequence as denoted by SEQ ID NO:4.
- 21. (Withdrawn) A composition for the passive immunization against an autoimmune or inflammatory disorder comprising a pharmaceutically effective amount of an antibody as claimed in claim 17.
- 22. (Withdrawn) A composition as claimed in claim 21, for the prevention or treatment of autoimmune or inflammatory disorder.
- 23. (Withdrawn) A method for predicting the susceptibility/predisposition of an individual to arthritis by testing a sample of serum from said individual for the presence of antibodies directed against a peptide as claimed in claim 1, by suitable immunoassay techniques.
  - 24. (Cancelled)
- 25. (Previously presented) The peptide of claim 1, the sequence of which consists of SEQ ID NO:1.

26-35. (Cancelled)

Serial No.: 09/847,637 Filed: May 2, 2001 Page: 5 of 10

36. (Withdrawn) A method for treating an autoimmune or inflammatory disorder, the method comprising:

identifying a subject suffering from an autoimmune or inflammatory disorder; and administering to the subject an effective amount of the peptide of claim 1.

- 37. (Withdrawn) The method of claim 36, wherein the subject is a human.
- 38. (Withdrawn) The method of claim 36, wherein the subject is suffering from rheumatoid arthritis or adjuvant arthritis.
- 39. (Withdrawn) The method of claim 36, wherein the peptide comprises consists of the amino acid sequence of SED ID NO:2.
- 40. (Withdrawn) The method of claim 36, wherein the peptide comprises consists of the amino acid sequence of SED ID NO:3.
  - 41. (Withdrawn) The method of claim 36, wherein the peptide is a synthetic peptide.
  - 42. (Withdrawn) The method of claim 41, wherein the peptide is chemically modified.
  - 43-48. (Cancelled)
  - 49. (Withdrawn) A method for generating antibodies, comprising: providing the peptide of claim 1; and administering the peptide to a subject.
  - 50. (Withdrawn) The method of claim 49, wherein the subject is an animal.

Serial No. : 09/847,637 Filed : May 2, 2001 Page : 6 of 10

51. (Withdrawn) The method of claim 50, wherein the subject is a rat, mouse, sheep, rabbit, or chicken.

- 52. (Withdrawn) The method of claim 50, wherein the method further comprising comprises isolating from the subject antibodies that recognize the peptide.
- 53. (Withdrawn) The method of claim 50, wherein the peptide comprises consists of the amino acid sequence of SED ID NO:2.
- 54. (Withdrawn) The method of claim 50, wherein the peptide comprises consists of the amino acid sequence of SED ID NO:3.
  - 55. (Withdrawn) The method of claim 50, wherein the peptide is a synthetic peptide.
  - 56. (Withdrawn) The method of claim 55, wherein the peptide is chemically modified.
  - 57. (Withdrawn) The method of claim 49, wherein the subject is a human.
- 58. (Withdrawn) The method of claim 57, wherein the peptide comprises consists of the amino acid sequence of SED ID NO:2.
- 59. (Withdrawn) The method of claim 57, wherein the peptide comprises consists of the amino acid sequence of SED ID NO:3.
  - 60. (Withdrawn) The method of claim 57, wherein the peptide is a synthetic peptide.
  - 61. (Withdrawn) The method of claim 60, wherein the peptide is chemically modified.

Serial No.: 09/847,637 Filed: May 2, 2001

Page : 7 of 10

62-72. (Cancelled)

73. (Withdrawn) A method for predicting the susceptibility or predisposition of a subject to arthritis, the method comprising:

providing the peptide of claim 1;

obtaining a serum sample from a subject; and

testing the sample to detect antibodies that recognize the peptide;

wherein absence of the antibodies indicates that the subject is susceptible or predisposed to arthritis.

- 74. (Withdrawn) The method of claim 73, wherein the subject is a human.
- 75. (Withdrawn) The method of claim 73, wherein the peptide eomprises consists of the amino acid sequence of SED ID NO:2.
- 76. (Withdrawn) The method of claim 73, wherein the peptide comprises consists of the amino acid sequence of SED ID NO:3.
  - 77. (Withdrawn) The method of claim 73, wherein the peptide is a synthetic peptide.
  - 78. (Withdrawn) The method of claim 77, wherein the peptide is chemically modified.

79-83. (Cancelled)